

The Neotropical Tipulidae in the Hungarian National Museum (Diptera)—III.

By CHAS. P. ALEXANDER, Ithaca, N. Y.

(Plate IX.)

Tribe 3—ERIOPTERINI.

Genus *Erioptera* Meigen.

1803. *Erioptera* Meigen; Illiger's Magaz., vol. 2, p. 262.

Erioptera (*Mesocyphona*) *annulipes* Williston.¹

One female from San Bernardino, Paraguay, Fiebrig, 1908; one female from Callanga, Peru.

Erioptera (*Mesocyphona*) sp.

One female from Paraguay, taken by Fiebrig. It is closely allied to *immaculata* Alexander.²

Erioptera (*Mesocyphona*) sp.

One male from Coroico, Bolivia. Closely allied to *caloptera* Say.³

Genus *Molophilus* Curtis.

1833. *Molophilus* Curtis; Brit. Entomol., p. 444.

Molophilus flavidus sp. n. (Pl. IX fig. 2).

Color yellowish; male antennæ elongate; ventral appendage of the male hypopygium deeply bifid.

Male.—Length, about 4.1 mm.; wing, 5.6 mm. Palpi brown; antennæ elongate, the segments covered with a dense pubescence, antennæ very light brown; head dull yellow.

Pronotum pale yellow without apparent stripes, the lateral margin of the sclerite and the sides of the pronotal scutellum very light yellow; scutum, scutellum and postnotum light brownish yellow. Pleuræ light yellow. Halteres, stem yellow, knob broken.

Legs, coxæ and trochanters yellow; femora yellow basally darkened into brownish on the apical half; tibiæ and tarsi brown.

Wings pale yellowish, veins light yellow, indistinct. Venation: basal deflection of *R*₄ plus 5 very reduced, or, in other words, the veins *R*₂ plus 3 and *R*₄ arise almost directly from the end of *R*₅.

Abdomen light yellowish brown. Hypopygium with the ventral appendage (see Plate IX, fig. 2) very deeply bifid, the inner branch shorter, at its tip slightly denticulated, the outer branch very long, bearing

¹ Williston, Trans. Ent. Soc. Lond., p. 294 (1896).

² Alexander, Proc. U. S. Nat. Mus., vol. 44, No. 1966, p. 518; pl. 66, fig. 20.

³ Say, Journ. Acad. Nat. Sci. Phila., vol. 3, p. 17 (1823).

along its ventral face a row of spine-like teeth, the tip flattened and provided with a few appressed teeth. The dorsal lobe at its dorso-apical angle provided with the usual curved hook-like appendage, the lobe densely clothed with long, pale hairs; the tip of the lobe ventrad of the hook-like appendage is produced into a short, sharp spine.

Holotype, male, Concepcion, Chile (P. Herbst, coll.), 1904, in the Hungarian National Museum.

The ? *Erioptera uniformis* Blanchard⁴, ? *longipes* Philippi⁵ and ? *pallida* Philippi⁶ may possibly be *Molophilus*. Philippi's description would seem to indicate rather unusual insects, *longipes* being described as having an elongate rostrum. In our present state of knowledge of Chilean Tipulidae, I cannot determine any of the forms before me as Blanchard's or Philippi's species.

Molophilus taurus sp. n. (Pl. IX, fig. 1.)

Color brown; male antennæ short, ventral appendage of the male hypopygium deeply bifid.

Male.—Length, about 4.6 mm.; wing, 6.2 mm. Palpi dark brown; antennæ short, the flagellar segments oval to elongate-oval, brown; head blackish gray.

Pronotum narrow, the scutum yellow, with a brown tinge, a bunch of long black hairs at each outer angle; scutellum light yellow. Mesonotal præscutum light grayish brown; scutum and scutellum light brown; postnotum very dark grayish brown. Pleuræ brownish gray, more yellowish around the wing-root. Halteres pale yellowish brown.

Legs brown. Wings subhyaline, the veins distinct, brown. Venation: *R*₄ plus 5 rather long, longer than the cross-vein *r*.

Abdomen dark brown, densely clothed with long pale hairs. Hypopygium with the ventral appendage (see Plate IX, figure 1) very deeply bifid, the inner branch short bearing on its inner face a number of blunt teeth, including a bunch of about three near the middle, the tip sharp; outer branch long, slender, directed caudad and entad, crossing its mate of the opposite side like a rapier, long, cylindrical, tapering to the sharp point. Dorsal lobe and its appendages about as in *flavidus*.

Holotype, male, Rancagua, Chile. December, 1904 (P. Herbst, coll.), in the Hungarian National Museum.

⁴ Blanchard, Gay, in Hist. fis. y polit. de Chile; Zool., vol. 7, p. 343 (1852).

⁵ Philippi, Verb. Zool-bot. Ges. Wien, vol. 15, p. 616 (1865).

⁶ Philippi, *l. c.*

Molophilus sagittarius sp. n. (Pl. IX, fig. 4.)

Color brown; male antennæ short; ventral appendage of the male hypopygium simple, its caudal margin with about six long serrations.

Male.—Length, about 3.8 mm.; wing, about 6 mm. Palpi dark brown. antennæ brown, short, the flagellar segments oval; head grayish brown.

Pronotum enormously enlarged, fitting around the cephalic margin of the mesonotum like a life belt, bright yellow. Præscutum and scutum dark brown; scutellum yellowish brown; postnotum dark brown. Pleuræ dark brown. Halteres entirely light yellow.

Legs, coxæ and trochanters brownish yellow; femora yellowish brown; tibiæ and tarsi brown.

Wings subhyaline, veins brown, rather distinct.

Abdomen dark brown. Hypopygium with the ventral appendage (See Plate IX, figure 4) simple, flattened, its outer margin with about six long serrations.

Female.—About as in the male but the pronotum is not conspicuously swollen and is not yellow; the thoracic præscutum has indications of three darker dorsal stripes; wings a little browner.

Holotype, male, Coroico, Bolivia. *Allotype*, female, Callanga, Peru. *Paratype*, female, Cillutincara, Bolivia.

Allied to *M. perseus* Alexander⁷, of Colombia, but the ventral appendage of the male hypopygium is much less regularly serrated on its outer margin and the teeth are fewer (about 6 instead of 10 or 12) and longer; dorsal lobe very small and narrow. The hypopygium of *M. guatemalensis* Alexander⁸ has never been described and so I figure the ventral hypopygial appendage (see Plate IX, fig. 3); the appendage is simple, sickle-shaped, on the outer side near the base with a sharp point.

Genus **Gnophomyia** Osten Sacken.

1859. *Gnophomyia*. Osten Sacken; Proc. Acad. Nat. Sci., Phila., p. 223.

Gnophomyia luctuosa Osten Sacken.

One female from the Sierra, San Lorenzo, Colombia; Uj-heyi, collector.

⁷ Alexander, Journ. N. Y. Ent. Soc., vol. 21, pp. 201, 202; pl. 6, figs. 4, 5 (1913).

⁸ Alexander, Proc. U. S. Nat. Mus., vol. 44, No. 1966, p. 511 (1913).

Gnophomyia maestitia sp. n. (Pl. IX, fig. 8.)

Color black; a yellow spot on the caudal end of the pronotum; wings dark colored with a darker brown cross band near the cord; halteres black; antennæ of the ♂ elongate. Male, length 5.5 mm.; wing, 5.8 mm. Female, length 5.5 mm.; wing, 5.8 mm.

Male.—Palpi black; antennæ long, extending beyond the base of the wing; flagellar segments elongate, black; head black.

Pronotal scutellum largely light yellow, the median portion dark. Mesonotal præscutum deep black; scutum, scutellum and postnotum black, the scutellum shiny and with a pearly lustre. Pleuræ black; a narrow, light yellow mark extending from the end of the pronotal scutellum almost to the wing-root; a yellow blotch between the middle and hind coxæ.

Halteres black. Legs black. Wings dark colored, a broad, irregular dark band in the vicinity of the cord; cells *R* and *M* almost hyaline. Venation (see Plate ix, figure 8): Cross-vein *r* connecting with *R*₂; *R*₂ very long; *R*_s short, straight.

Abdominal tergites dark brownish black; sternites a little paler.

Female.—Yellow color of the thorax reduced, the pronotal pattern confined to a small rounded spot underneath the pseudosutural fovea; yellow on the mesosternum not indicated; antennæ rather shorter.

Holotype, male, Vilcanota, Peru; *Allotype*, female, Callanga, Peru; *Paratypes*, 1 male, Vilcanota, Peru; 3 males, 2 females, Callanga, Peru; in the Hungarian National Museum; 1 male, 1 female, paratypes, in author's collection.

Most closely allied to *nigrina* Wied.¹⁰ from which it differs in its slightly larger size, difference in body coloration and in wing pattern; *luctuosa* O. S.¹¹ and *tristissima* O. S.¹² are the only other species with which it could be confused, differing from the former by its long antennæ, non-pubescent wings, etc., and from the latter by its black halteres, short and straight radial sector, etc.

Gnophomyia pervicax sp. n. (Pl. IX, fig. 7.)

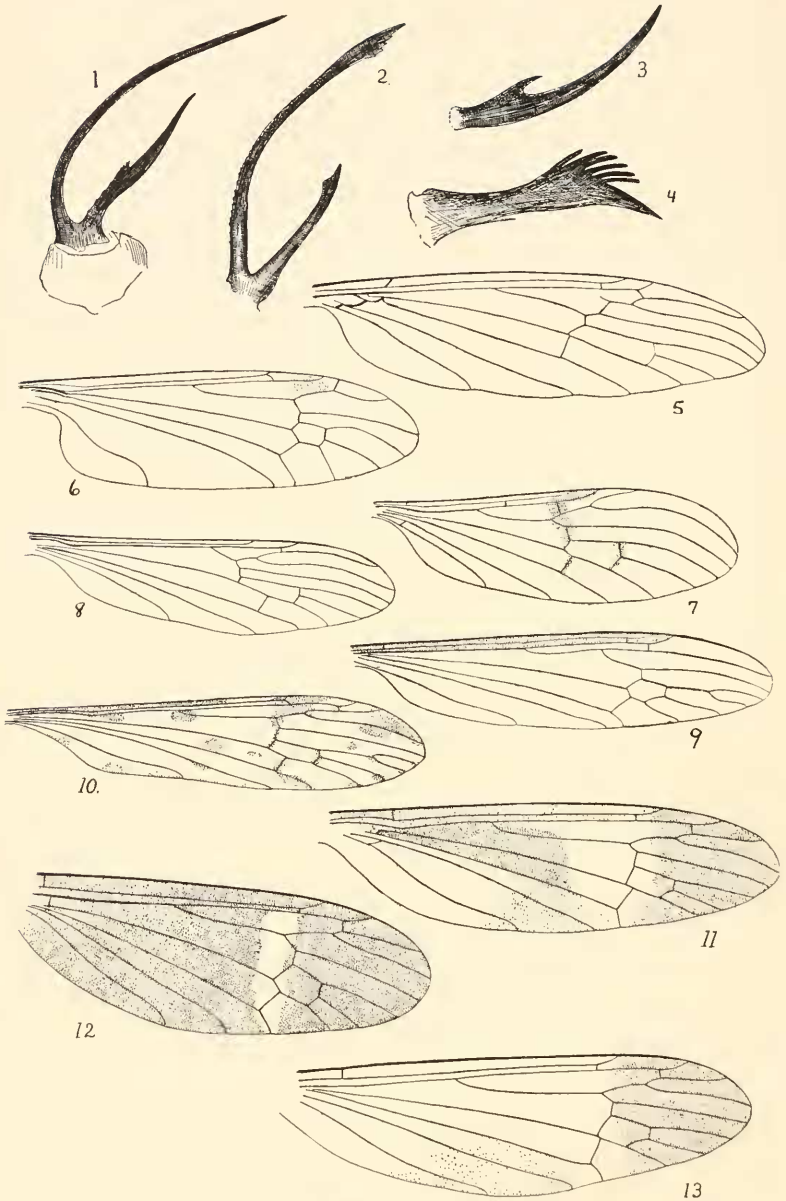
Shiny yellowish; thoracic dorsum with three brown stripes; pleuræ yellow with a dorsal brown band; wings hyaline with a narrow brown seam along the cord; vein *R*₂ short. Male, length 6 mm.; wing, 6.4 mm. Female, length 4.5 mm.; wing, 6 mm.

Female.—Palpi dark brown, the basal segment a little lighter; an-

¹⁰ Wiedemann, *Aussereur-Zweifel. Ins.*, vol. 1, p. 37 (1828).

¹¹ Osten Sacken, *Proc. Acad. Nat. Sci., Phila.*, p. 224 (1859).

¹² Osten Sacken, *l. c.*



NEOTROPICAL TIPULIDAE—ALEXANDER.

tennæ brown; front yellow; vertex brownish; occiput and genæ dull yellow.

Pronotum light dull yellow. Mesonotal præscutum shiny, dull yellow with three very broad brown stripes which are confluent behind, the middle stripe beginning at the cephalic margin of the sclerite; scutum light brown, the middle of the lobes dark brown; scutellum light brown; postnotum light brown, the sides very dark, almost black, especially behind. Pleuræ yellowish, the mesopleuræ tinged with brown; a large rounded dark brown spot between the bases of the halteres and the wings. Halteres light yellow, knob brown.

Legs, coxæ and trochanters yellowish, femora and tibiæ dull yellow, tarsi dull yellow becoming brown on the apical segments.

Wings subhyaline, a brown band extending from the tips of *Sc* and *R* down across the cord to cell *1stM2*; veins brown. Venation (see Plate IX, figure 7): *Sc* long, extending beyond the cross-vein *r*; cross-vein *r* connecting with *R2* plus 3 nearer to its origin than its tip; *R2* very short.

Abdomen with the four basal tergites yellow with a broad, dark brown, lateral margin; remaining tergites dull brown; sternites, basal ones dull yellow, terminal four sclerites suffused with brown.

Male.—This sex shows a dark brown pleural band across the sclerites; femora with a light brown tip, tibiæ with a distinct brown tip; cross-vein *r* about midlength of *R2* plus 3 and a faint brown seam along the outer end of cell *1stM2*.

Holotype, male; *Allotype*, female, Callanga, Peru, in the Hungarian National Museum.

G. pervicax is allied to *G. hirsuta* Alex.¹³ (Brazil) in its peculiar venation but has only a single narrow alar cross-band.

Genus *Trimicra* Osten Sacken.

1861. *Trimicra* Osten Sacken; Proc. Acad. Nat. Sci., Phila., p. 290.

Trimicra sp.

One male from Asuncion, Paraguay, June, 1905. Vezenyi.

Genus *Sigmatomera* Osten Sacken.

1869. *Sigmatomera* Osten Sacken; Mon. Dipt. N. Am., vol. 4, p. 137.

Sigmatomera occulta sp. n. (Pl. IX, fig. 5.)

Wings without dark cross bands; cell *1stM2* closed.

Female.—Length, 13.5 mm.; wing, 14.3 mm. Rostrum and palpi

¹³ Alexander, Proc. U. S. Nat. Mus., vol. 44, No. 1966, p. 523, plate 67, fig. 30 (1913).

light yellow, the terminal palpal segments a little more brown; antennæ with the two basal segments dull yellow, flagellum black; head dull greenish brown (greasy in the type).

Thoracic dorsum dull brownish yellow without well defined stripes; caudo-lateral angles of the præscutum brown; scutum and scutellum brown; postnotum greenish brown. Pleuræ dull yellow. Halteres yellow.

Legs light yellow, the tibiæ a little darkened at the tip, tarsi brown.

Wings hyaline, cells *C* and *Sc* yellow; veins *C*, *Sc* and *R* yellow, other veins dark brown. Venation (see Plate IX, figure 5): Deflection of *R*₂ plus 3 with a spur at midlength; cell 1st*M*₂ closed.

Abdominal tergites rich brown with a blackish median blotch; sternites brownish.

Holotype, female, Ascuncion, Villa Morra, Paraguay, Vezenyi, in the Hungarian National Museum.

S. occulta differs from *S. flavipennis* O. S.¹⁴, the only described species with a closed cell 1st*M*₂, in its lack of dark crossbands on the wing.

Genus *Rhabdomastix* Skuse.

1889. *Rhabdomastix* Skuse; Proc. Linn. Soc. N. S. Wales, ser. 2, vol. 4, p. 828.

Rhabdomastix (Rhabdomastix) illudens sp. n. (Pl. IX, fig. 6.)

Antennæ of the ♂ between four and five times as long as the body; a dark brown stigmal spot.

Male.—Length, 7.4 mm.; wing, 7.7 mm.; antennæ, 33 mm. Palpi very short, the first segment light brown, the apical segments almost black; antennæ with the basal segment enormously enlarged, barrel-shaped, the second segment small, rounded, flagellar segments successively elongated, the apical segments very long, the whole antennæ almost five times as long as the body; scapal segments brown, flagellar segments very pale, the extreme tip of each segment narrowly dark brownish black, the apical antennal segments more brown; the whole head underneath the swollen scapal segment is very deep and stout; head light gray.

Thorax brown with a light gray bloom; pseudosutural fovea large, prominent, black; tuberculate pits rather far cephalad, black; scutum and postnotum grayish, scutellum rich brown. Pleuræ pale brownish with a sparse gray bloom. Halteres short, yellowish.

Legs, coxæ and trochanters yellowish; fore and middle trochanters long and slender, the hind trochanter shorter; femora and tibiæ yellowish brown becoming browner on the tarsi.

¹⁴ Osten Sacken, *Smithson. Miscell. Coll.*, vol. 11, No. 256 (1873).

Wings subhyaline; a brown stigmal spot; veins pale brownish yellow. Venation (see Plate IX, figure 6) almost as in *R. (Sacandaga) flava* Alex.¹⁵ but the cross-vein *m*, here, is much longer.

Abdominal tergites yellowish brown, sternites paler, yellowish.

Holotype, male, Coroico, Bolivia, in the Hungarian National Museum.

From *R. (R.) ostensackeni* Skuse¹⁶ (Australia) it differs in the much greater length of the antennae which is here more than four times as long as the body, in *ostensackeni* not quite twice as long. From the members of the subgenus *Sacandaga*, it differs in the elongate male antennae. The discovery of a member of this subgenus in the New World is of exceptional interest.

Genus *Lecteria* Osten Sacken.

1887. *Lecteria* Osten Sacken; Berl. Entomol. Zeitschr., vol. 31, p. 206.

Lecteria armillaris Fabr.¹⁷

One female from Espirito Santo, Brazil; one specimen, sex uncertain, from Callanga, Peru.

Lecteria abnormis sp. n. (Pl. IX, fig. 9.)

Tibiæ spurred; color grayish with a narrow dorsal brown median line extending from the head to the mesonotal scutellum; wings subhyaline with a brown costal margin; vein *R*₂ obliterated.

Sex, (?) (probably a ♀). Head and thorax, 4.5 mm.; wing, 12.8 mm. Rostrum and palpi dark brown; antennal segments 1 and 2 dull yellow, the first segment very long, the second very short, globular; flagellar segments brownish; front, vertex and occiput yellowish gray with a narrow dark brown median vitta originating between the antennæ and running to the caudal margin.

Pronotum gray with a narrow dark brown median stripe. Mesonotal præscutum brownish, more grayish behind and on the sides, with a dark brown median line; scutum and scutellum light gray, the dark brown median vitta ending on the scutellum; postnotum gray. Pleuræ very light gray. Halteres dull yellow, the knob dark brown.

Legs, coxæ light gray, trochanters dull yellow, femora dull brownish yellow with a dark brown subapical ring close to the tip, tibiæ spurred, dull yellow, brown at the tip; tarsi brownish yellow, the apices of the segments darker, brown.

¹⁵ Alexander, Ent. News, vol. 22, pp. 351, 352 (1911).

¹⁶ Skuse, Proc. Linn. Soc. N. S. Wales, vol. 4, second series, p. 829, pl. 22, fig. 15 (1889).

¹⁷ Fabricius, Syst. Antl., p. 26 (1805).

Wings subhyaline, cells *C* and *Sc* brown, veins brown. Venation (see Plate IX, figure 9) vein *R*₂ entirely obliterated and only two branches of the sector attain the margin.

Abdomen broken.

Holotype, Paraguay, Fiebrig, coll., in the Hungarian National Museum.

L. abnormis belongs to *Psaronius* Enderlein, if this be admitted as a valid genus or subgenus.

We have here a venational phenomenon which is comparable to that in the subgenus *Leiponeura* of *Gonomyia* Meigen, that is, the total obliteration of one of the branches of the radial sector. This condition is presaged by *L. obliterated* Alex.¹⁸ (British Guiana) but in this new species the loss of *R*₂ is complete. In keys to the Tipulid tribes this would run down to the Antochini and students of the family should exercise care in the study of this interesting group of species.

Tribe 4—LIMNOPHILINI.

Genus *Limnophila* Macquart.

1834. *Limnophila* Macquart; Suit. à Bffon, vol. I, p. 95.

Limnophila kerteszi sp. n. (Pl. IX, fig. 10.)

Thorax grayish without distinct stripes; wings long and narrow with brown markings, these largest along the costal border.

Female.—Length, 8.8 mm.; abdomen, 7.6 mm.; wing, 8.6 mm. Rostrum and palpi very dark brown; antennæ dark brownish black; head grayish brown.

Thoracic præscutum yellowish brown without apparent stripes; scutum gray, the lobes dark brown; scutellum and postnotum light gray. Pleuræ brown with a dull gray bloom. Halteres long, very pale, almost whitish, the knob a little brown.

Legs, coxæ brownish, trochanters dull yellow, femora dull yellow with an indistinct brown subapical ring, tibiæ brown, tarsi brown.

Wings whitish with brown marks as follows: Cell *C* brown except the outer quarter; cell *Sc*₁ except the tip; a brown mark at the base of cell *R*, another at the origin of *R*₅; an irregular brown seam along the cord; a large brown blotch occupying the end of cell *R*₂ and the middle of cell *R*₃; a rounded spot in the middle of cell *R*₅; marks on the forks of veins, cross-veins and deflections of veins and at the ends of the longitudinal veins; gray clouds along the anal angle of the wing. Venation (see Plate IX, figure 10): *Sc*₂ longer than *Sc*₁; *R*₅ very long, straight in a line with *R*₂ plus 3; cell *M*₁ present.

¹⁸ Alexander, Proc. U. S. Nat. Mus., vol. 44, No. 1966, p. 494, plate 68, figure 41 (1913).

Abdomen long, tergites dark brown; sternites dark brown on the basal third and along the sides; remainder of each segment yellow.

Holotype, female, Sao Paulo, Brazil, in the Hungarian National Museum.

***Limnophila conspersa* Enderlein.¹⁹**

One female from Espirito Santo, Brazil. More properly referred to *Limnophila* than *Lecteria* or *Psaronius*.

Genus ***Epiphragma*** Osten Sacken.

1859. *Epiphragma* Osten Sacken; Proc. Acad. Nat. Sci., Phila., p. 238.

***Epiphragma cordillerensis* Alexander.²⁰**

One female, Callanga, Peru; one, sex uncertain, from San Antonio, Bolivia.

Tribe 5—HEXATOMINI.

Genus ***Eriocera*** Macquart.

1838. *Eriocera* Macquart; Dipt. Exot., vol. I, pt. I, p. 74.

***Eriocera perdecora* sp. n. (Pl. IX, fig. 11.)**

Head black; thoracic dorsum reddish; abdomen black; wings brown with a broad yellow cross band and yellowish anal cells.

Female.—Length, about 18.5 mm.; wing, 14.4 mm. Rostrum and palpi black; antennæ black; head black.

Pronotum black; mesonotum entirely light orange-yellow, the extreme lateral margin of the sclerites dark brown. Pleuræ dark brownish black. Halteres black.

Legs, coxæ and trochanters dark brown; femora brown, darker at the tip; tibiæ and tarsi dark brown; middle and hind femora with the basal half brighter, brownish yellow.

Wings dark brown, cells *C* and *Sc* yellow; a broad yellow band across the wing mostly before the cord; anal cells largely yellowish. Venation, see Plate IX figure 11.

Abdominal tergites dark brownish black, the last segments more reddish, valves of the ovipositor dark brown; sternites, basal segments a little brighter, the last segment reddish.

Holotype, female, Callanga, Peru, in the Hungarian National Museum.

In my key to the Neotropical *Erioceræ* (*Psyche*, vol. 21, pp. 34-37. 1914.) *perdecora* would run down to the couplet con-

¹⁹ Enderlein, Zool. Jahrbuch, vol. 32, pt. 1, pp. 49, 50 (fig. D1) (1912). (as *Dactylolabis*).

²⁰ Alexander, Journ. N. Y. Ent. Soc., vol. 21, pp. 202, 203, pl. 5, fig. 8 (1913).